DIG®
water matters

410BT Series Bluetooth®
Battery Powered Irrigation Controller

410BT-ASV | 410BT-MVA

INSTRUCTION MANUAL

FCC certified | Bluetooth® certified | Waterproof | 3-year Limited Warranty

1. INTRODUCTION

Thank you for purchasing DIG's 410BT Single Station Battery Operated Controller. This manual describes how to get the 410BT series controller up and running quickly. After reading this manual and becoming familiar with the basic functionality of the controller, use the manual as a reference for less common tasks in the future.

2. ABOUT THE 410BT BATTERY OPERATED CONTROLLER

The 410BT series irrigation controller employs the latest in Bluetooth® technology using the free DIG BTT app for Android™ or iPhone®. The 410BT is available as a single station battery operated controller and is powered by two AA batteries that can last up to one year using name brand alkaline batteries. The controller is enclosed in a compact, waterproof housing to protect it from degradation.

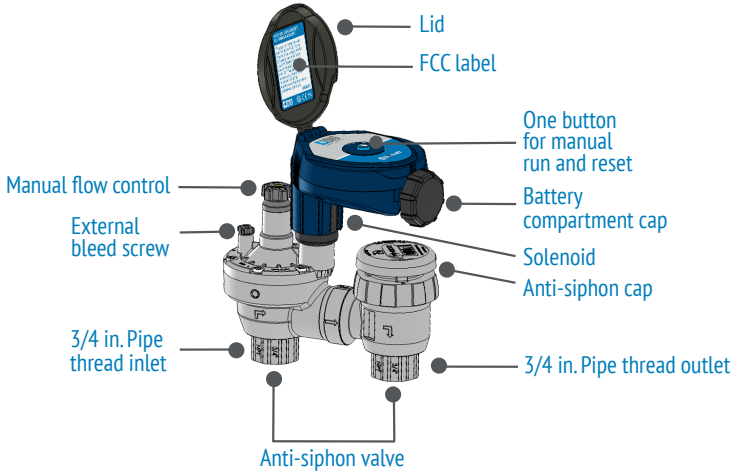
3. INSTALLING THE BATTERIES

1. Open the battery compartment cap by turning it counterclockwise.
2. Install two fresh, brand name, AA alkaline batteries (not included) and note the proper direction of the positive and negative orientation on the underside of the controller.
3. Insert and screw the battery cap clockwise. Make sure to securely tighten the cover firmly by hand only. The controller will now appear on the smartphone app and is ready to be connected to and programmed.

4. PRE-INSTALLATION INSTRUCTIONS

This manual covers installation for the 410BT-ASV and 410BT-MVA models. If the 410BT-ASV model was purchased, go to section 5 for installation instructions. If the 410BT-MVA was purchased, skip to section 6 for installation instructions.

5. ANTI-SIPHON VALVE COMPONENT IDENTIFICATION



5.1 ANTI-SIPHON VALVE INSTALLATION

The 410BT-ASV can be installed directly to PVC pipe with two PVC male adapters (not included). Inlet 3⁄4 in. FNPT, outlet 3⁄4 in. FNPT.

Rated operating pressure: 10 to 125 PSI
Recommended operating pressure: 10 to 80 PSI

NOTE: The 410BT-ASV must be installed at least 6 in. higher than the highest sprinkler head on the system or back-drainage may occur.

Additional control valves must not be installed downstream of the anti-siphon valve. The valve must not be operated continuously for more than 12 hours in any 24-hour period. Consult local codes for specific details.

1. Flush main line until water runs clear before installation.

2. Shut off main water supply.

3. Install the anti-siphon valve directly to PVC pipe using 3⁄4 in. PVC male adapters (Figure 5a and 5b) or use 3/4 in. schedule 80 nipple. The arrow on valve body indicates direction of water flow.

NOTE: Wrap all fittings with Teflon tape. Do not use pipe cement on the valve as this will damage the valve and void the warranty. Make sure when wrapping fittings with Teflon tape that no excess gets into the internal assembly. Tighten the fittings with a wrench, but do not over tighten.

4. Turn the main water supply on and pressurize the system.

5. To test the 410BT-ASV, press the button on the unit. A click will be heard, indicating the valve is open. Check that the system is operating correctly and press the button again to turn it off. A second click will be heard indicating that the valve closed.

6. The unit is now ready to be programmed.

Figure 5a

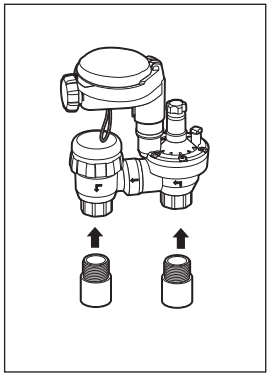
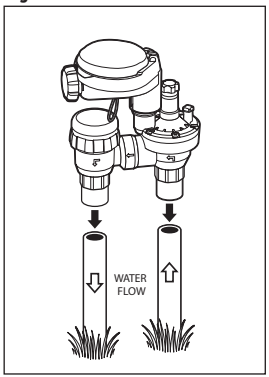
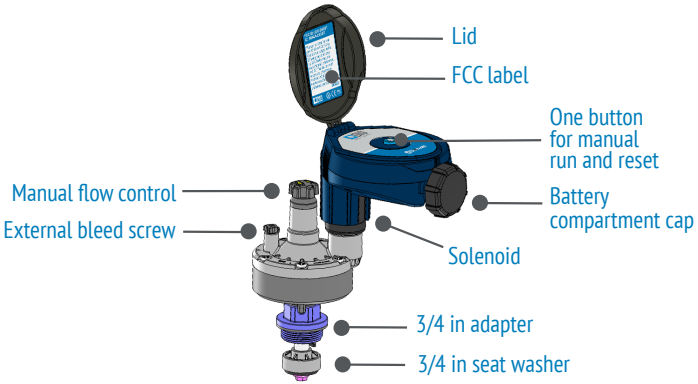


Figure 5b



6. MVA COMPONENT IDENTIFICATION



6. MVA INSTALLATION

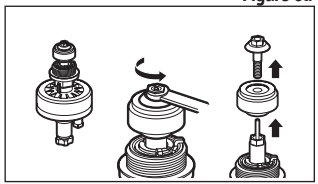
6.1 CHANGING ACTUATOR ADAPTERS

The 410BT-MVA timer is factory set to fit a 3/4 in. brass manual anti-siphon valve. To install the controller with actuator on a 1 in. manual anti-siphon valve, the 3/4 in. seat washer and adapter must be removed and replaced with the 1in. adapter and seat washer, which are included in this box.

1. Turn the actuator so that the seat washer and the 3/4 in. threaded adapter face up.

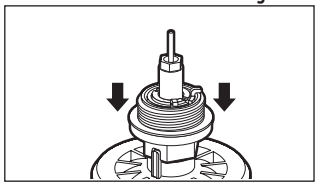
2. Using pliers, or a 5/16 in. wrench, remove the seat washer screw by turning counter clockwise and pull off the 3/4 in. seat washer assembly **(see Fig. 6a).**

Figure 6a



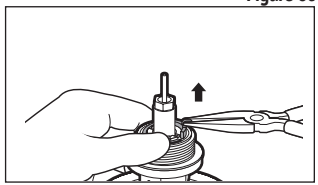
3. Push the 3/4 in. threaded adapter down towards the actuator to ease the tension on the retainer clip **(see Fig. 6b).**

Figure 6b



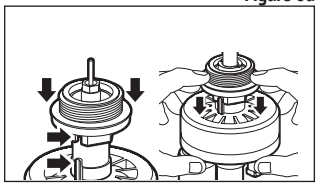
4. Next, place your thumb on one side of the retainer clip and with a pair of pliers grip the other side of the retainer clip and pull outwards, away from your thumb, and upwards, removing it from the base of the 3/4 in. threaded adapter then, remove the adapter **(see Fig. 6c)**.

Figure 6c



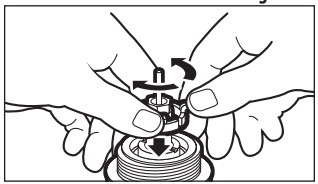
5. Install the 1 in. threaded adapter by pushing it onto the actuator stem and making sure the notch on the adapter lines up with the notch on the stem of the actuator **(see Fig. 6d)**.

Figure 6d



6. Spread the retainer clip with your thumbs and push the retainer into the adapter until it clicks **(see Fig. 6e)**.

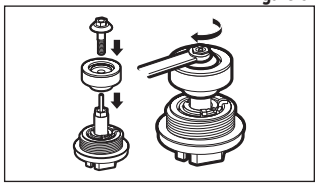
Figure 6e



7. Install the 1 in. seat washer assembly as shown. Insert the seat washer screw into the bottom of the actuator stem and tighten turning clockwise **(see Fig. 6f)**.

   NOTE: Do not over-tighten.

Figure 6f



6.2 MANUAL VALVE ACTUATOR INSTALLATION

Rated operating pressure: 20 to 125 PSI

Recommended operating pressure: 20 to 80 PSI

1. Shut off main water supply.

2. Remove the manual stem from the existing valve and temporarily remove the anti-siphon cap **(Fig. A)**.

3. Replace any existing worn washers with the new ones provided **(Fig. B).**

4. Install the actuator into the manual anti-siphon valve body by turning actuator clockwise. Tighten firmly, but do not over tighten **(Fig. C)**. Re-install anti-siphon cap.

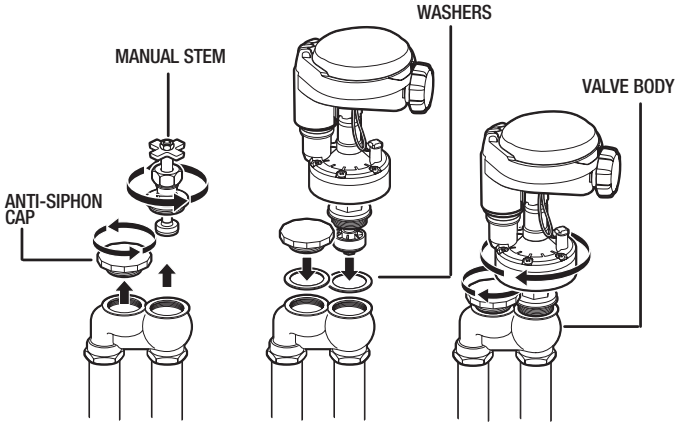


Figure A Figure B Figure C

5. Turn actuator flow control knob clockwise until it stops **(Fig. D)**.

6. Turn on main water supply.

7. Activate the solenoid through the timer manual button, a click will be heard indicating the valve is open.

8. Turn the actuator flow control knob counter clockwise to allow flow and check the system to make sure that the sprinklers or the drip system is working properly **(Fig. E)**.

9. De-activate the solenoid through the timer's manual button, a faint click will be heard and the valve will close. If flow continues, turn flow knob clockwise, one full turn at the time until flow is stopped, and the valve is shut off.

10. Repeat steps 7 and 9 and make sure that flow is turned on and off.

    Note: Turn the flow control knob clockwise to decrease flow, counter-clockwise to increase flow. For low-flow drip systems below 60 gallons per hour, flow control knob should be turned no more than 1 to 3 turns up (counter-clockwise) from the fully closed position.

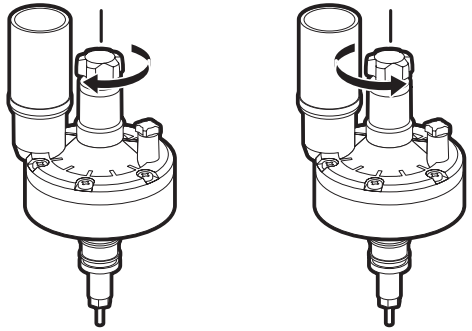


Figure D Figure E

APP SCREENS OVERVIEW

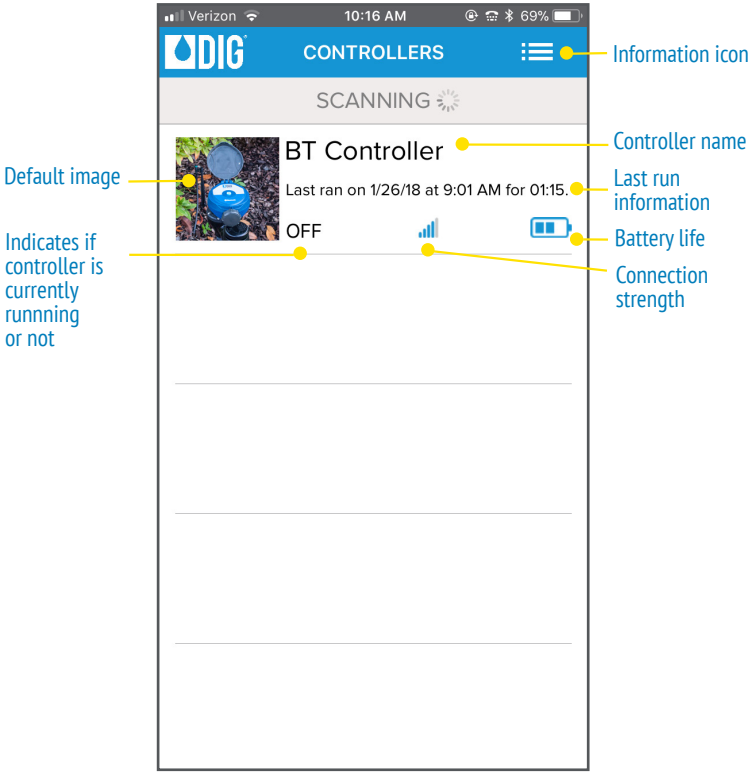
The DIG BTT app automatically scans for nearby controllers after installation. Any DIG Bluetooth® controllers within 50′ (15 meters) line of sight will appear on screen.

- Your new controller will appear as the BT Controller. Its default image, status (watering -on- or not watering -off-), connection strength, and battery life will appear alongside it.

- Tap on the controller to connect to it and start programming.

You can access Connection History and Contact Us through the information icon in the top right corner of the screen.

- The Connection History allows you to see every controller and timer connected to from this phone or tablet. It stores the data it last received from each tap timer, but no editing can be done. Deleting an entry will remove all the saved data for that unit. Any passwords and/or pictures need to be reentered. To delete an entry, tap it and select the trash icon.



HOME SCREEN

Once connected, the Home screen will appear. This screen has everything needed to program the controller.

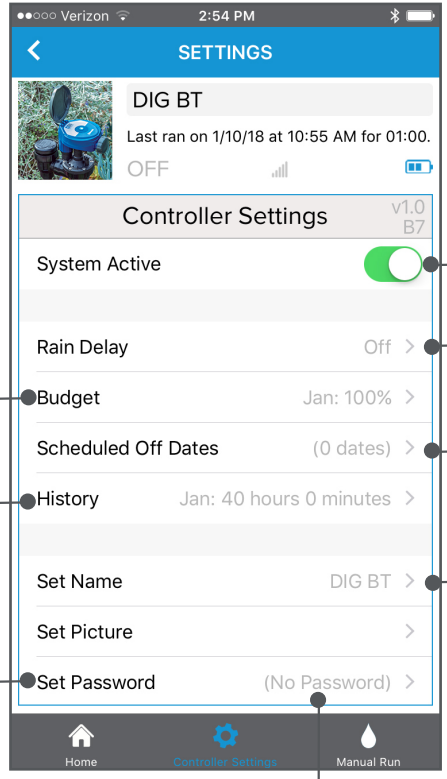
By default, the controller's Program is off. To turn it on, push the switch under the "Program" area. It will turn green and the Program area will light up indicating that the program is active and can now be modified.

The controller is now ready to be programmed. Simply select the schedule (weekly, even/odd, or cyclical), set your start date or days, add times, and set a duration. The controller is updated immediately each time a button is tapped.

CONTROLLER SETTINGS

The controller's Settings screen contains everything else needed to fully control your irrigation system. It can be reached by selecting the Controller Settings button on the bottom of the screen. On this screen you can turn on or off the entire system through the System Active switch, add a rain delay to shut off the controller for a limited time, budget each month to modify the watering duration based on the season, set specific dates on which the timer should not run, and view 12-month history of the controller.

Use the settings menu to rename the controller to something memorable and upload a picture for easy and fast recognition for future viewing. Set a password to prevent unallowed users from connecting to your timer. The password is saved to the phone so it will (almost) never have to be entered again (unless it's changed or when connecting to the timer with a new phone).



Turn the entire system on/off. Controller will not water when system is off

Set a rain delay

Set up to nine dates where the controller will prevent watering

Set name of the controller

Budgeting per month (affects duration only)

View monthly watering history for the past 12 months

Set picture for the controller

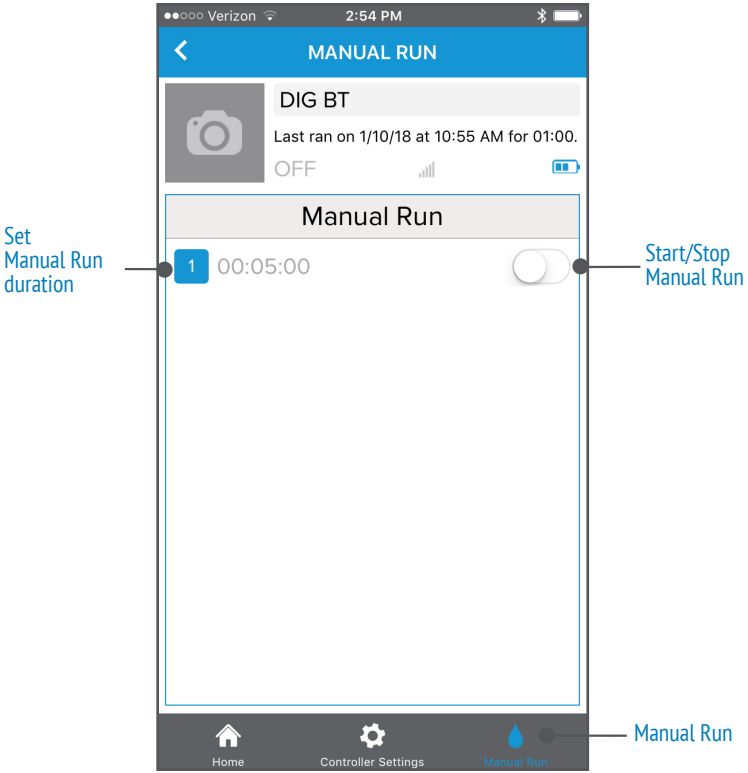
Set password for controller. Password will only be seen when entering controller from a new phone. Reset controller to reset password if forgotten

MANUAL RUN

The Manual Run screen allows for manual operation of the controller. It can be reached by selecting the Manual Run button on the bottom right of the screen.

To manually run the controller, tap the button on the right of the screen. This button can also be used to stop any existing run. The default manual run time is for five minutes; this can be changed by tapping on the time and changing it.

The controller can also manually run from the controller itself by tapping the water droplet button . The duration of this manual run is equal to the duration of the scheduled program. The button can also be used to end any watering.



RESET TO FACTORY DEFAULTS

- Press and hold the button on the 410BT for 15 seconds. This will remove all app settings, historical information, and any set passwords. This is the only way to remove a password so try not to forget it!

TECHNICAL ASSISTANCE

Should you encounter any problem(s) with this product or if you do not understand its many features, please refer to this operating manual first. If further assistance is required, DIG offers the following customer support:

- DIGPRO Technical Service USA: DIG's Technical Service Team is available to answer questions in English and Spanish from 8:00 AM to 5:00 PM (PST) Monday-Friday (except holidays) at 1.800.344.2281 or 1.760.727-0914.
- Questions also can be e-mailed to questions@digcorp.com or faxed to 760.727.0282.
- Specification documents and manuals are available for download at www.digcorp.com.
- Customer Assistance Outside the USA: Contact your local distributor

FCC

This device complies with FCC and IC radiation exposure limits set forth for an uncontrolled environment. The device should be installed and operated with a minimum distance of 20cm between the radiator and your body. This device must not be collocated or operating in conjunction with any other antenna or transmitter.

I. Changes or modifications not expressly approved by DIG Corporation could void the user's authority to operate the equipment.

II. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures: Reorient or relocate the receiving antenna. Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.Consult the dealer or an experienced radio/TV technician for help.

III. Industry Canada

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

WARRANTY

DIG CORPORATION warrants these products to be free from defects in material and workmanship for a period of three years from date of purchase. This warranty does not cover damage resulting from accident, indoor uses, misuse, neglect, modification, improper installation or subjection to line pressure more than 125 lbs. per square inch for anti-siphon valves, in-line valves and from an actuator. This warranty shall extend only to the original purchaser of the product for use by the purchaser. The obligation of DIG CORPORATION under this warranty is limited to repairing

or replacing at its factory this product which shall be returned to the factory within three years after the original purchase and which on examination is found to contain defects in material and workmanship. DIG CORPORATION SHALL IN NO EVENT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND; THE SOLE OBLIGATION OF DIG BEING LIMITED TO REPAIR OR REPLACEMENT OF DEFECTIVE PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. Unattended use for prolonged periods without inspection to verify proper operation is beyond the intended use of this product, and any damage resulting from such use shall not be the responsibility of DIG CORPORATION. There are no warranties, which extend beyond the description on the face hereof. In the case of purchase of the product for use other than, for irrigation purposes, DIG CORPORATION hereby disclaims any implied warranties including any warranties of merchantability and fitness for a particular purpose. In the case of the purchase of the product for personal, family or household purposes, DIG CORPORATION disclaims any such warranties to the extent permitted by law. To the extent that any such disclaimer or implied warranties shall be ineffectual, then any implied warranties shall be limited in duration to a period of three years from the date of the original purchase for use by the purchaser. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you. In order to obtain performance under this warranty, the unit must be returned to the factory, along with proof of purchase indicating original date of purchase, shipping prepaid, addressed as follows: DIG CORPORATION, 1210 Activity Drive, Vista, CA 92081. Repaired or replaced units will be shipped prepaid to the name and address supplied with the unit returned under warranty. Allow four weeks for repairs and shipping time. Repair of damaged units not otherwise within warranty may be refused or done at a reasonable cost or charge at the option of DIG CORPORATION. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

water matters

1210 Activity Drive
Vista, CA 92081-8510, USA

www.digcorp.com
e-mail: dig@digcorp.com

26-301 REVA 042618
Printed in the USA
DIG is a Registered Service Mark of DIG Corp.